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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/823,833	03/30/2001	Steven Lemay	IGTECH.0005P	6122

32856 7590 11/18/2003

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EXAMINER

ENATSKY, AARON L

ART UNIT	PAPER NUMBER
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3713

DATE MAILED: 11/18/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

N K

Office Action Summary	Application No.	Applicant(s)	
	09/823,833	LEMAY ET AL.	
	Examiner	Art Unit	
	Aaron L Enatsky	3713	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 September 2003.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 37-49 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 37-49 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

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DETAILED ACTION

Response to Amendment

Examiner acknowledges receipt of the Response to Office Action on 09/02/03.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, *if* the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 37-40, 42, 44, 46-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent No. 6,263,392 to McCauley in view of Request For Comments: 951 by Croft et al. ("Croft"). In regard to claims 37, 42, and 48 McCauley teaches a method and apparatus for interfacing peripheral devices to a host computer (Abstract). The peripheral devices include controllers and monetary authentication devices (Abstract), which effect operability of the host game machine. The peripheral devices also contain control code for interfacing with the host machine and other peripheral devices (1:34-2:20). Furthermore, the system was built to meet a long felt need to increase energy efficiency and reduce cost and complexity of computer interface hardware designs (2:35-38). McCauley does not however detail a host device providing control code necessary to operate peripheral devices. Croft teaches a client machine connected to a server machine in which the client machine sends a BOOTP or bootstrapping request to the server and the server provides a bootfile, otherwise known as operating code, to be loaded into memory and executed by the client machine (Page 1). Croft teaches such a system to provide an

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unattended power-up to a machine that lacks permanent operating code storage (Page 1). Other well-known reasons behind remote bootstrapping is efficient software updating without requiring manual software updating on every peripheral device in use. Croft's steps include transmitting control code from a host in response to a client request, storing control code at the client machine, and executing control code at the client machine (Page 1-2). One would be motivated to modify McCauley to include automatic operating code downloads in peripheral devices taught by Croft because automated system maintenance would aid in reducing cost and complexity of computer interface hardware designs, which is a major impetus for McCauley's system design. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McCauley to use the automatic operating code downloads taught by Croft to reduce cost and complexity of the peripheral devices.

In regard to claim 38 and 46, Croft teaches that a client device need only contain code enough to request operating control code from a host device (Page 1).

In regard to claims 39-40, Croft teaches downloading control code during boot operation (Page 1), which would happen during every system power-up including removing power from the device.

In regard to claim 44, Croft teaches a controller identifies client device to transmit control code (Page 3).

In regard to claim 47, Croft teaches use read-only memory for storing resident code (Page 1).

In regard to claim 49, McCauley teaches using USB as one of plurality of interfaces for connecting peripheral devices to a host machine (2:40-62).

Claim 41 is rejected under 35 U.S.C. 103(a) as being unpatentable over McCauley in

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view of Croft as applied to claims 3 7-40, 42, 44, 46-49 above, and further in view of US Patent No. 6,052,779 to Jackson et al. ("Jackson"). McCauley in view of Croft teaches the limitations as discussed above, but does not teach sending a polling signal to peripheral devices and peripheral devices responding by sending a control code request. Jackson teaches a polling request sent to client systems from a controlling system that causes client systems to respond by sending a control code request to the controlling system (Abstract). Jackson teaches such an operation to allow client device startup before a target start-up time (Abstract). One would be motivated to modify McCauley in view of Croft to use the remote polling taught by Jackson to allow greater remote control over peripheral devices which would further reduce the maintenance costs by through further automation. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McCauley in view of Croft to include remote polling taught by Jackson for increased cost reductions.

Claims 43 and 45 are rejected under 35 U.S.C. 103(a) as being unpatentable over McCauley in view of Croft as applied to claims 37-40, 42, 44, 46-49 above, and further in view of US Patent No. 5,802,592 to Chess et al. ("Chess"). McCauley in view of Croft teaches the limitations as discussed above, but does not teach control code authenticating before transmitting control code or periodically verifying control code. Chess teaches a system and method for protecting integrity of control code (Abstract), which involves authenticating control code during the bootstrapping process (2:51-67). Chess also teaches regularly verifying authenticity of the control code contents (Abstract). One would be motivated to modify McCauley in view of Croft to use bootstrapping authentication taught by Chess as Chess teaches that verifying control code

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is important to detect accidental or malicious code changes (1:10-60). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify McCauley in view of Croft to use bootstrapping authentication taught by Chess to increase system security.

Response to Arguments

Applicant's arguments with respect to claims 37-49 have been considered but are not considered persuasive.

Combination of McCauley in view of Croft is improper: Applicant holds that combination of McCauley in view of Croft is improper due to the fact that McCauley teaches peripheral devices containing pre-resident code for device operation. Applicant believes with this fact would have made it improper to take Examiner's stance that providing an upgradeable peripheral device is obvious. Examiner disagrees with Applicant's assessment, in that upgrading code in peripheral devices was a known feature in peripheral devices at the time of the invention and considered within the capabilities of one of ordinary skill. Having resident code in a device is a common method of reducing material costs because the device functionality can be controlled and delivered with less physical hardware, which is an impetus of McCauley's invention. Furthermore, it is also common knowledge to have the ability to upgrade code that would serve the purpose of program bug fixes or add additional functionality to a device to extend its operating life. These additional reasons are also supported by McCauley's provided motivation. For further evidence, one needs only to take a quick survey of prior art to find it to be common for peripheral devices to retain these common features, such as upgradeable code in peripheral device memory. To provide additional support, Examiner has cited Chang '778 (3:1-

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5) and Fulghum '967 (Abstract). Both Chang and Fulghum teach that is was known to have memory and code on peripheral devices that were meant to be upgradable. Thus, Examiner is unconvinced that the combination of McCauley in view of Croft used in the rejection of paper no. 9 was improper and the rejection still stands.

Citation of Pertinent Prior Art

US Patent No.5,903,778 to Chang teaches upgrading code on peripheral devices.

US Patent No. 6,078,967 to Fulghum teaches upgrading code on peripheral devices.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Aaron L Enatsky whose telephone number is 703-305-3525. The examiner can normally be reached on 8-6 M-Th.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Teresa Walberg can be reached on 703-308-1327. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-1148.

Aaron Enatsky
November 10, 2003


Teresa Walberg
Supervisory Patent Examiner
Group 3700